Physica C 222 (1994) 401–404
North-Holland

PHYSICA C

Author index to volume 222

Abrikosov, A.A., Weakly screened Coulomb interaction and properties of HTSC's **222**, 191
Acha, C., see P. Levy **222**, 212
Adachi, S., see K. Isawa **222**, 33
Adachi, S., see P. Laffez **222**, 303
Akimitsu, J., see M. Uehara **222**, 27
Alario-Franco, M.A., C. Chaillout, J.J. Capponi, J.-L. Tholence and B. Souletie, A new HTSC family: the copper analogs of the single-layer Hg or Tl copper oxide superconductors **222**, 52
Aleshina, N.M., see V.K. Vlasko-Vlasov **222**, 367
Anderson, A.C., see D. Bhatt **222**, 283

Basu, S.N., see D. Bhatt **222**, 283
Bekeris, V., see P. Levy **222**, 212
Berberich, P., see J. Humlíček **222**, 166
Beskrovnyi, A.I., S. Durčok, J. Hejtmánek, Z. Jirák, E. Pollert and I.G. Shelkova, Structural modulation, oxygen content and transport properties in $Bi_{2.13}Sr_{1.87}CuO_{6+y}$ and $Bi_{2.05}Sr_{1.54}La_{0.41}CuO_{6+y}$ superconductors **222**, 375
Bhatt, D., S.N. Basu, A.C. Westerheim and A.C. Anderson, Microstructural dependence of sputtered $YBa_2Cu_3O_{7-x}$ thin films on deposition parameters **222**, 283
Blinov, E.V., R. Laiho, E. Lähderanta, A.K. Tagantsev and K.B. Traito, Influence of the spatial distribution of trapped magnetic flux on the effective pinning energy of vortices in ceramic Y–Ba–Cu–O **222**, 69
Bohandy, J., B.F. Kim and K. Moorjani, Magnetically modulated resistance measurements of epitaxial thin films of $YBa_2Cu_3O_{7-y}$ **222**, 297
Bruynseraede, Y., see B. Wuyts **222**, 341
Buchholz, D.B., see D.C. DeGroot **222**, 271

Capponi, J.J., see M.A. Alario-Franco **222**, 52
Cardona, M., see J. Humlíček **222**, 166
Chaillout, C., see M.A. Alario-Franco **222**, 52
Chang, R.P.H., see D.C. DeGroot **222**, 271
Chateigner, D., see N. Pellerin **222**, 133
Chen, D.H., see R.S. Liu **222**, 13
Cohen, O., T.R. Cummins, G.C. Georgiadis, C.S. Rastomjee, F.H. Potter, R.G. Egdell, W.R. Flavell, D.S.-L. Law and L. Leonyuk, A photoemission study of $Bi_{3.6}Pb_{0.4}Sr_3Ca_{2.4}Er_{0.7}Cu_4O_{16}$ in normal and superconducting states **222**, 105
Crabtree, G.W., see V.K. Vlasko-Vlasov **222**, 361
Cummins, T.R., see O. Cohen **222**, 105

DeGroot, D.C., T.P. Hogan, C.R. Kannewurf *, D.B. Buchholz, R.P.H. Chang, F. Gao, M. Feng and R.A. Nordin, Microwave surface resistance of $YBa_2Cu_3O_{7-\delta}$ thin films deposited by pulsed organometallic beam epitaxy **222**, 271
Dravid, V.P., see H. Zhang **222**, 1
Durčok, S., see A.I. Beskrovnyi **222**, 375

Egdell, R.G., see O. Cohen **222**, 105
Elesin, V.F., V.A. Kashurnikov, A.V. Krasheninnikov and A.I. Podlivaev, Metal–insulator transition in Emery–Anderson model. Density of states calculations **222**, 127

Feng, M., see D.C. DeGroot **222**, 271
Ferrari, H., see P. Levy **222**, 212
Fisher, L.M., see V.K. Vlasko-Vlasov **222**, 367
Flavell, W.R., see O. Cohen **222**, 105
Freeman, A.J., see D.L. Novikov **222**, 38
Fueki, K., see Y. Idemoto**222**, 257, 333
Fukuoka, A., see M. Wakata **222**, 97
Fung, K.K., see H. Gu **222**, 57
Fung, P.C.W., see C.C. Lam **222**, 87

Gan, Z.Z., see C.D. Wei **222**, 267
Gao, F., see D.C. DeGroot **222**, 271
Gao, Z.X., see B. Wuyts **222**, 341
Georgiadis, G.C., see O. Cohen **222**, 105
Goncharov, V.N., see V.K. Vlasko-Vlasov **222**, 367
Goodenough, J.B., see M.G. Smith **222**, 157
Gu, H., K.K. Fung and C.Q. Jin, Twin, superstructure and transient tetragonal–monoclinic transition in electron-doped $Nd_{2-x}Ce_xCuO_{4-\delta}$ **222**, 57

Ha, D.H., I.S. Kim, Y.K. Park, K. Oka and Y. Nishihara, Crystal growth of Bi-Sr-Ca-Y-Cu-O by the travelling solvent floating zone method **222**, 252
Hasegawa, T., H. Kobayashi, H. Kumakura, H. Kitaguchi and K. Togano, The effect of Ag on the formation of $Bi_2Sr_2Ca_1Cu_2O_y$ thick film **222**, 111
Hasegawa, T., see K. Yanagisawa **222**, 184
He, Q., see C.D. Wei **222**, 267
Hejtmánek, J., see A.I. Beskrovnyi **222**, 375
Hervieu, M., see C. Martin **222**, 19
Hinks, D.G., see H. Zhang **222**, 1
Hogan, T.P., see D.C. DeGroot **222**, 271
Hu, S.F., see R.S. Liu**222**, 13, 278
Humlíček, J., C. Thomsen, M. Cardona, K. Kamarás, M. Reedyk, M.K. Kelly and P. Berberich, Far-infrared response of free carriers in $YBa_2Cu_3O_7$ from ellipsometric measurements **222**, 166
Huvé, M., see C. Martin **222**, 19

Idemoto, Y., Y. Iwata and K. Fueki, Defect chemistry of $Ba_{1-x}K_xBiO_y$ superconductors **222**, 257

Idemoto, Y., K. Uchida and K. Fueki, Anisotropic diffusion of oxygen in $Nd_2CuO_{4-\delta}$ single crystal **222**, 333
Indenbom, M.V., H. Kronmüller, T.W. Li, P.H. Kes and A.A. Menovsky, Equilibrium magnetic properties and Meissner expulsion of magnetic flux in $Bi_2Sr_2CaCu_2O_x$ single crystals **222**, 203
Isawa, K., A. Tokiwa-Yamamoto, M. Itoh, S. Adachi and H. Yamauchi, Encapsulation method for the synthesis of nearly single-phase superconducting $HgBa_2Ca_2Cu_3O_{8+\delta}$ with $T_c \geqslant 135$ K **222**, 33
Isawa, K., see M. Wakata **222**, 97
Isobe, M., Y. Matsui and E. Takayama-Muromachi, High-pressure synthesis of $Y_{1-x}Ca_xSr_2GaCu_2O_{7\pm\delta}$ $(0 \leqslant x \leqslant 1.0)$ **222**, 310
Itoh, M., see K. Isawa **222**, 33
Iwata, Y., see Y. Idemoto **222**, 257
Izumida, H., see S. Katsuyama **222**, 317

Jefferson, D.A., see R.S. Liu**222**, 13, 278
Jiang, X.P., see H.B. Liu **222**, 119
Jin, C.Q., see H. Gu **222**, 57
Jirák, Z., see A.I. Beskrovnyi **222**, 375
Jorgensen, J.D., see H. Zhang **222**, 1

Kaiser, A.B., see C.K. Subramaniam **222**, 47
Kamarás, K., see J. Humlíček **222**, 166
Kannewurf *, C.R., see D.C. DeGroot **222**, 271
Kashurnikov, V.A., see V.F. Elesin **222**, 127
Katsuyama, S., H. Izumida, K. Majima and H. Nagai, Effective pinning centers for flux lines in oxide superconductors with YBCO structure **222**, 317
Kelly, M.K., see J. Humlíček **222**, 166
Kes, P.H., see M.V. Indenbom **222**, 203
Khan, D.C., see S. Singh **222**, 233
Kim, B.F., see J. Bohandy **222**, 297
Kim, C.-J. and P.J. McGinn, Anomalous magnetization and oxygen diffusion in the melt-textured Y–Ba–Cu–O domain with/without $BaCeO_3$ addition **222**, 177
Kim, I.S., see D.H. Ha **222**, 252
Kitaguchi, H., see T. Hasegawa **222**, 111
Kobayashi, H., see T. Hasegawa **222**, 111
Koizumi, T., see K. Yanagisawa **222**, 184
Kopelevich, Y., see S. Moehlecke **222**, 149
Krasheninnikov, A.V., see V.F. Elesin **222**, 127
Kronmüller, H., see M.V. Indenbom **222**, 203
Kumakura, H., see T. Hasegawa **222**, 111
Kwok, E.M.Y., see C.C. Lam **222**, 87

Laffez, P., X.J. Wu, S. Adachi, H. Yamauchi and N. Môri, Synthesis of superconducting $Sr_2CuO_{3+\delta}$ using high-pressure techniques **222**, 303
Lähderanta, E., see E.V. Blinov **222**, 69
Laiho, R., see E.V. Blinov **222**, 69
Lam, C.C., C.M. Lee, E.M.Y. Kwok, P.C.W. Fung, K.N. Wong and T.F. Yu, Numerical analysis on the mass-anisotropic behaviour of the $YBa_2Cu_3O_{7-\delta}$ system based on the bipolaronic theory of high-T_c superconductivity **222**, 87
Law, D.S.-L., see O. Cohen **222**, 105
Lee, C.M., see C.C. Lam **222**, 87
Lee, H.-G., see I.-S. Yang **222**, 386
Lee, S., see I.-S. Yang **222**, 386
Lee, S.-I., see I.-S. Yang **222**, 386
Leonyuk, L., see O. Cohen **222**, 105
Levy, P., H. Ferrari, C. Acha and V. Bekeris, Irreversibility effects in polycrystalline high-T_c superconductors studied by AC susceptibility **222**, 212
Li, T.W., see M.V. Indenbom **222**, 203
Libbrecht, S., see B. Wuyts **222**, 341
Liu, H.B., D.E. Morris, X.P. Jiang and A.P.B. Sinha, Silver raises the T_c of Pb-1212 to 78 K **222**, 119
Liu, R.S., S.F. Hu, D.H. Chen, D.S. Shy and D.A. Jefferson, Crystal structure of the $(Pb, Hg)Sr_2(Ca, Y)Cu_2O_{7-\delta}$ superconductor **222**, 13
Liu, R.S., S.F. Wu, D.S. Shy, S.F. Hu and D.A. Jefferson, Improvement of phase purity and accelerated formation of the Tl-1223 phase from the stoichiometric compositions $(Tl_{0.6}Pb_{0.2}Bi_{0.2})(Sr_{2-x}Ba_x)Ca_2Cu_3O_9$ $(x=0.2–0.3)$ **222**, 278
Liu, Z.X., see C.D. Wei **222**, 267

Maenhoudt, M., see B. Wuyts **222**, 341
Maignan, A., see C. Martin **222**, 19
Majima, K., see S. Katsuyama **222**, 317
Martin, C., M. Hervieu, M. Huvé, C. Michel, A. Maignan, G. Van Tendeloo and B. Raveau, Lead–mercury-based superconductors. The 1212 cuprate $Pb_{0.7}Hg_{0.3}Sr_{2+x}Ca_{0.7}Nd_{0.3-x}Cu_2O_{7-\delta}$ and the new oxycarbonate $Pb_{0.7}Hg_{0.3}Sr_4Cu_2CO_3O_7$ **222**, 19
Matsui, Y., see M. Uehara **222**, 27
Matsui, Y., see K. Yanagisawa **222**, 184
Matsui, Y., see M. Isobe **222**, 310
McGinn, P.J., see C.-J. Kim **222**, 177
Menovsky, A.A., see M.V. Indenbom **222**, 203
Michel, C., see C. Martin **222**, 19
Misochko, O.V. and E.Ya. Sherman, Raman-active finite-wavevector excitations. Experimental evidence and theoretical treatment **222**, 219
Moehlecke, S. and Y. Kopelevich, Magnetic field dependent quantum flux creep in $Bi_2Sr_2Ca_2Cu_3O_{10}$ **222**, 149
Moorjani, K., see J. Bohandy **222**, 297
Môri, N., see P. Laffez **222**, 303
Morris, D.E., see H.B. Liu **222**, 119
Mryasov, O.N., see D.L. Novikov **222**, 38
Mukherjee, K., see J.M. Yoo **222**, 241

Nagaev, E.L., Impurity phase separation in magnetic degenerate semiconductors as an alternative to electronic phase separation **222**, 324
Nagai, H., see S. Katsuyama **222**, 317
Nakata, H., see M. Uehara **222**, 27
Neumeier, J.J., see M.G. Smith **222**, 157
Nikitenko, V.I., see V.K. Vlasko-Vlasov**222**, 361, 367
Nishihara, Y., see D.H. Ha **222**, 252
Nordin, R.A., see D.C. DeGroot **222**, 271

Novikov, D.L., O.N. Mryasov and A.J. Freeman, Anisotropic compressibility and effects of pressure on the electronic structure and T_c of Hg-based superconductors **222**, 38

Odier, P., see N. Pellerin **222**, 133
Oka, K., see D.H. Ha **222**, 252
Osquiguil, E., see B. Wuyts **222**, 341

Paranthaman, M., Single-step synthesis of bulk $HgBa_2Ca_2Cu_3O_{8+\delta}$ **222**, 7
Paranthaman, M., see C.K. Subramaniam **222**, 47
Park, J.-H., see I.-S. Yang **222**, 386
Park, Y.K., see D.H. Ha **222**, 252
Pellerin, N., P. Odier, P. Simon and D. Chateigner, Nucleation and growth mechanisms of textured YBaCuO and the influence of Y_2BaCuO_5 **222**, 133
Podlivaev, A.I., see V.F. Elesin **222**, 127
Pollert, E., see A.I. Beskrovnyi **222**, 375
Poluschenko, O.A., see V.K. Vlasko-Vlasov **222**, 367
Polyanskii, A.A., see V.K. Vlasko-Vlasov**222**, 361, 367
Potter, F.H., see O. Cohen **222**, 105

Rastomjee, C.S., see O. Cohen **222**, 105
Raveau, B., see C. Martin **222**, 19
Reedyk, M., see J. Humlíček **222**, 166
Ren, H.T., see C.D. Wei **222**, 267
Risbud, S.H., see C.-H. Shan **222**, 393

Sahoda, S., see M. Uehara **222**, 27
Shadowitz, A., Effect of the vector potential on the forces in a London superconducting tube in a parallel field and a resultant means for measuring the penetration depth **222**, 78
Shan, C.-H. and S.H. Risbud, Superconductivity and microstructure in the $Bi_{1.7}(Pb_{0.3})Hg_xSr_2Ca_2Cu_3O_\delta$ $(0 \le x \le 0.4)$ system **222**, 393
Shelkova, I.G., see A.I. Beskrovnyi **222**, 375
Sherman, E.Ya., see O.V. Misochko **222**, 219
Shimoi, Y., see K. Yamaji **222**, 349
Shin, H.-S., see I.-S. Yang **222**, 386
Shy, D.S., see R.S. Liu**222**, 13, 278
Simon, P., see N. Pellerin **222**, 133
Singh, S. and D.C. Khan, Study of Hall effect, electrical resistivity and magnetoresistance in $Bi_2Sr_{2-x}Gd_xCa_1Cu_2O_{8+\delta}$ $(x=0.00–0.65)$ systems **222**, 233
Sinha, A.P.B., see H.B. Liu **222**, 119
Smith, M.G., J.B. Goodenough, R.D. Taylor, J.J. Neumeier and J.O. Willis, Fe migration, magnetic order, and the suppression of superconductivity in $Y_{1-z}Ca_zSr_2Cu_{2.5}Fe_{0.5}O_{6+x}$ **222**, 157
Souletie, B., see M.A. Alario-Franco **222**, 52
Subramaniam, C.K., M. Paranthaman and A.B. Kaiser, Thermoelectric power and resistivity of bulk $HgBa_2CuO_{4+y}$ superconductors and the effects of annealing **222**, 47

Tagantsev, A.K., see E.V. Blinov **222**, 69
Takano, S., see M. Wakata **222**, 97
Takayama-Muromachi, E., see M. Isobe **222**, 310
Takekawa, S., see K. Yanagisawa **222**, 184
Taylor, R.D., see M.G. Smith **222**, 157
Tholence, J.-L., see M.A. Alario-Franco **222**, 52
Thomsen, C., see J. Humlíček **222**, 166
Tinchev, S.S., Current–phase relation in high-T_c weak links made by oxygen-ion irradiation **222**, 173
Togano, K., see T. Hasegawa **222**, 111
Tokiwa-Yamamoto, A., see K. Isawa **222**, 33
Traito, K.B., see E.V. Blinov **222**, 69

Uchida, K., see Y. Idemoto **222**, 333
Uehara, M., S. Sahoda, H. Nakata, J. Akimitsu and Y. Matsui, New Hg based oxycarbonate superconductor $HgBa_2Sr_2Cu_2O_{6+\delta}(CO_3)$ **222**, 27

Van Tendeloo, G., see C. Martin **222**, 19
Veal, B.W., see V.K. Vlasko-Vlasov **222**, 361
Vlasko-Vlasov, V.K., V.I. Nikitenko, A.A. Polyanskii, G.W. Crabtree, U. Welp and B.W. Veal, Macroturbulence in high-T_c superconductors **222**, 361
Vlasko-Vlasov, V.K., V.N. Goncharov, V.I. Nikitenko, A.A. Polyanskii, I.F. Voloshin, L.M. Fisher, N.M. Aleshina and O.A. Poluschenko, Visualization of weak links in melt-textured YBCO ceramics **222**, 367
Voloshin, I.F., see V.K. Vlasko-Vlasov **222**, 367

Wagner, J.L., see H. Zhang **222**, 1
Wakata, M., S. Takano, J. Wang, A. Fukuoka, K. Isawa and H. Yamauchi, Synthesis and transport properties of (Bi, Cu)-1212 cuprates. Evidence of the localization of the doped holes **222**, 97
Wang, J., see M. Wakata **222**, 97
Wang, Y.Y., see H. Zhang **222**, 1
Wei, C.D., Z.X. Liu, Z.Z. Gan, H.T. Ren, L. Xiao and Q. He, Scaling properties of the magnetization curves of the $DyBa_2Cu_3O_y$ crystal prepared by the melt-textured growth method **222**, 267
Welp, U., see V.K. Vlasko-Vlasov **222**, 361
Westerheim, A.C., see D. Bhatt **222**, 283
Willis, J.O., see M.G. Smith **222**, 157
Wong, K.N., see C.C. Lam **222**, 87
Wu, S.F., see R.S. Liu **222**, 278
Wu, X.J., see P. Laffez **222**, 303
Wuyts, B., E. Osquiguil, M. Maenhoudt, S. Libbrecht, Z.X. Gao and Y. Bruynseraede, Relation between the Hall angle slope and the carrier density in oxygen-depleted $YBa_2Cu_3O_x$ films **222**, 341

Xiao, L., see C.D. Wei **222**, 267

Yamaji, K. and Y. Shimoi, Superconducting transition of the two-chain Hubbard model indicated by diagonalization calculations **222**, 349
Yamauchi, H., see K. Isawa **222**, 33
Yamauchi, H., see M. Wakata **222**, 97

Yamauchi, H., see P. Laffez **222**, 303
Yanagisawa, K., Y. Matsui, T. Hasegawa, T. Koizumi and S. Takekawa, Crystal structure and effects of Fe doping of a non-superconducting phase (B-phase) in the Bi–Sr–Cu–O system **222**, 184
Yang, I.-S., H.-G. Lee, H.-S. Shin, J.-H. Park, S.-I. Lee and S. Lee, Raman spectra of $HgBa_2Ca_2Cu_3O_{8+d}$ superconductors **222**, 386
Yoo, J.M. and K. Mukherjee, X-ray polefigure analyses of texturing and textural hardening observed in mechanical deformation of $Bi_{1.6}Pb_{0.4}Sr_2Ca_2Cu_3O_z$ superconductor HIP cladded on Ag substrate **222**, 241
Yu, T.F., see C.C. Lam **222**, 87

Zhang, H., Y.Y. Wang, V.P. Dravid, J.L. Wagner, D.G. Hinks and J.D. Jorgensen, High-resolution and analytical electron microscopy of $HgBa_2CuO_{4+\delta}$. A new copper-oxide superconductor **222**, 1
Zhang, X., A similarity in structural changes in $YBa_2Cu_4O_8$ by Ca doping and by high pressure **222**, 227

Physica C 222 (1994) 405–406
North-Holland

PHYSICA C

Analytic Subject Index to Volume 222

AC susceptibility 7, 212
Ag substrate 111
Anderson localization 97
Anisotropic superconductor 191, 333
Antiferromagnetic order 157, 324
Applications of high-T_c superconductors 241

Band structure 127
Bipolaronic superconductivity 87

Carrier concentration 47
Charge-transfer gap 127
CO_3 compounds 19, 27
Complex conductivity 166
Compressibility 38
Coulomb screening 191
Critical current density 317, 367
Critical state model 69, 203, 267
Cu–O chains 317
Cu–O planes 227
Current-phase relation 173

Defect structures 317, 367
Dielectric function 166
Dimensional crossover 149

EELS 1
Electrical resistivity 47, 191, 233, 257, 297, 341
Electron diffraction 27
Electron–electron interaction 191
Electronic structure 1, 38, 105, 324, 349
Electron microscopy 283
Electron–phonon coupling 219
Emery–Anderson model 127
Energy gap 87, 191
ESR 133

Flux dynamics 361
Flux pinning 69, 177, 203, 212, 317
Forces 78

Grain alignment (texturing) 241
Granular superconductivity 212, 297, 367, 393

Hall effect 233, 341
High-pressure effect 227
High-pressure synthesis 303, 310
High-temperature X-ray diffraction 111
Hot isostatic pressing (HIP) 241
HREM 1, 13, 38, 184
Hubbard model 349

Infrared spectroscopy 166

Josephson coupling 149
Josephson effect 173

Lattice parameters 52, 257
London penetration depth 78

Magnetic relaxation 69
Magnetic susceptibility 33, 157, 310
Magnetization 69, 177, 203, 361
–of $DyBa_2Cu_3O_y$ 267
Magnetization relaxation 149
Magnetoconductivity 97
Magneto-optical method 203
Magnetoresistance 233
Meissner effect 257
Metal–insulator transition 127, 233
MgO substrate 111
Modulated structure 57
Modulated structures 184, 375
Mössbauer spectroscopy 157
Multilayers 303

Neutron diffraction 375
Non-ohmic behaviour 361
Normal-state properties 324, 341

Oxygen annealing 7
Oxygen content 97
Oxygen diffusion 177, 333
Oxygen ordering 177
Oxygen stoichiometry 87, 257, 341, 375
Oxygen vacancy 333

Peritectic reaction 133
Phase separation 324
Phase stability 7
Phonon spectrum 219, 386
Photoemission spectroscopy 105
Pulsed organo-metallic chemical vapor deposition 271

Quantum flux creep 149

Raman scattering 219, 386

Scanning electron microscopy (SEM) 111
Single-crystal growth 252
SQUID 173
Sr-Cu-O system 303
Structure
–of $Bi_{1.7}(Pb_{0.3})Hg_xSr_2Ca_2Cu_3O_\delta$ 393
–of $Bi_{3.6}Pb_{0.4}Sr_3Ca_{2.4}Er_{0.7}Cu_4O_{16}$ 105
–of Bi–Sr–Cu–O 184
–of $CuBa_2Ca_{n-1}Cu_nO_{2n+2+x}$ 52
–of $HgBa_2Ca_2Cu_3O_{8+d}$ 386
–of $HgBa_2CuO_{4+\delta}$ 1
–of $HgBa_2Sr_2Cu_2O_{6+\delta}(CO_3)$ 27
–of $(Pb,Hg)Sr_2(Ca_{1-x}Y_x)Cu_2O_{7-\delta}$ 13
–of $(Pb_{0.5}Cu_{0.5})Sr_2(R_{1-x}Ca_x)Cu_2O_7$ 119
–of $Pb_{0.7}Hg_{0.3}Sr_{2+x}Ca_{0.7}Nd_{0.3-x}Cu_2O_{7-\delta}$ 19
–of $Pb_{0.7}Hg_{0.3}Sr_4Cu_2CO_3O_7$ 19
–of $Sr_2CuO_{3+\delta}$ 303
–of $YBa_2Cu_4O_8$ 227
–of YBaCuO 133
–of Y–Ba–Cu–O 177
Substitution effects 184, 227, 278, 317
–in Bi-Sr-Ca-Y-Cu-O 252
–in $(Pb,Hg)Sr_2(Ca_{1-x}Y_x)Cu_2O_{7-\delta}$ 13
–in $(Pb_{0.5}Cu_{0.5})Sr_2(R_{1-x}Ca_x)Cu_2O_7$ 119
Surface resistance 271
Synthesis
–of $Bi_{1.7}(Pb_{0.3})Hg_xSr_2Ca_2Cu_3O_\delta$ 393
–of $Bi_2Sr_2Ca_1Cu_2O_y$ 111
–of $CuBa_2Ca_{n-1}Cu_nO_{2n+2+x}$ 52
–of $HgBa_2Ca_2Cu_3O_{8+\delta}$ 7, 33
–of $HgBa_2CuO_{4+y}$ 47
–of $Nd_2CuO_{4-\delta}$ 333
–of $(Pb_{0.5}Cu_{0.5})Sr_2(R_{1-x}Ca_x)Cu_2O_7$ 119
–of $Pb_{0.7}Hg_{0.3}Sr_{2+x}Ca_{0.7}Nd_{0.3-x}Cu_2O_{7-\delta}$ 19
–of $Pb_{0.7}Hg_{0.3}Sr_4Cu_2CO_3O_7$ 19
–of $(Tl_{0.6}Pb_{0.2}Bi_{0.2})(Sr_{2-x}Ba_x)Ca_2Cu_3O_9$ 278
–of $Y_{1-z}Ca_zSr_2Cu_{2.5}Fe_{0.5}O_{6+x}$ 157
–of $YBa_2Cu_3O_{7-x}$ 283

–of YBaCuO 133

Tetragonal-monoclinic transition 57
Texturation Y_2O_3 133
Thermoelectric effects 47
Thin films 271, 283, 297, 341
Turbulent structures 361
Twins 57
Two-band model 349

Variable range hopping 97
Vector potential 78

Weak links 173, 241, 297, 367

X-ray diffraction 13, 33